<u>AMENDMENTS TO THE CLAIMS</u>

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1.   (Currently Amended) A system that facilitates determining an intent of a user, comprising:

a search component that identifies a result set for a user search query; ~~and~~

a data store that maintains objects, the data store correlates the objects with queries that were previously employed to retrieve the objects;

a user intent discovery component that determines a set of potential search areas based at least in part upon the result set of the user search query and results of previous queries; and

a query relation calculator that determines a level of relatedness between the user search query and the previous queries, the query relation calculator selects previous queries to display to the user based at least in part upon the calculated level of relatedness;

wherein a level of relation between the previous queries and the user search query is obtained at least in part by determining distance metrics between the previous queries and the user search query.

2.   (Original) The system of claim 1, wherein the previous queries are obtained *via* reviewing the result set of the user search query.

3.   (Canceled)

4.   (Currently Amended) The system of claim 1 3, wherein the distance metrics are

determined by utilizing the algorithm $\|q,q'\| = 1 - \dfrac{|R[q] \cap R[q']|}{|R[q] \cup R[q']|}$, where $\|q,q'\|$ is a distance metric

between the user search query q and one or more previous queries q', and R is a binary relation

on $Q \times D$, wherein Q is a set of queries previously employed by the search component and D is a

set of objects within a data store that is searched over by the search component.

5.   (Original) The system of claim 4, wherein the level of relation between the previous

queries and the user search query is obtained at least in part by utilizing a modified maximal

marginal relevance scheme.

6.   (Original) The system of claim 5, the maximal marginal relevance scheme employs the

algorithm $\arg\min\limits_{q'} \left[\lambda \|q,q'\| - (1-\lambda) \min\limits_{q''} \|q',q''\| \right]$, where λ is an interpolation factor that is

established *a priori*, and q'' represents one or more previous queries that have already been

considered prior to the consideration of q'.

7.   (Original) The system of claim 1, further comprising a filter component that limits a

number of objects within the result set of the user search query.

8.   (Original) The system of claim 1, further comprising a filter component that removes

previous queries that have fewer words than the user search query from consideration.

9.   (Original) The system of claim 1, further comprising a filter component that removes

previous queries that include pre-defined strings from consideration.

10.   (Original) The system of claim 1, further comprising a filter component that removes

previous queries that are lexically similar to the user search query from consideration.

11.   (Original) The system of claim 1, further comprising a filter component that removes previous queries that comprise characters that are not printable ASCII characters from consideration.

12.   (Original) The system of claim 1, further comprising a feedback component that facilitates customization of the system according to user preference.

13.   (Original) The system of claim 1, further comprising an artificial intelligence component that makes inferences with respect to at least one of selection and arrangement of the potential search areas according to one or more of user state, user history, user context, and contextual information.

14.   (Original) The system of claim 13, the contextual information comprising one or more of temperature, time of day, location, and day of a week.

15.   (Original) The system of claim 1 further comprising a user profile, the user profile comprising information relating to at least one of selection and arrangement of the potential search areas.

16.   (Original) The system of claim 15, the user profile being portable.

17.   (Currently Amended) A system that facilitates determining user intent, comprising:

    a search engine that receives a user search query, the search engine searches over objects within a data store according to the user search query, the objects being associated with queries previously employed to locate the objects; and

    a query relation calculator that determines a level of relatedness between the user search query and the previous queries, the query relation calculator selects previous queries to display to the user based at least in part upon the calculated level of relatedness;

    wherein the level of relatedness is based at least in part upon distance metrics between the user search query and the previous queries.

18.   (Canceled)

19.   (Currently Amended) The system of claim <u>17</u> ~~18~~, wherein the distance metrics are determined by utilizing the algorithm $\left\| q,q' \right\| = 1 - \dfrac{|R[q] \cap R[q']|}{|R[q] \cup R[q']|}$, where $\left\| q,q' \right\|$ is a distance metric between the user search query q and one or more previous queries q', and R is a binary relation on $Q \times D$, wherein Q is a set of queries previously employed by the search engine and D is a set of objects within a data store that is searched over by the search engine.

20.   (Original) The system of claim 19, wherein the level of relatedness between the previous queries and the user search query is obtained at least in part by utilizing a modified maximal marginal relevance scheme.

21.   (Original) The system of claim 20, the maximal marginal relevance scheme employs the algorithm $\underset{q'}{\arg\min}\left[\lambda \left\| q,q' \right\| - (1-\lambda)\underset{q''}{\min}\left\| q',q'' \right\| \right]$, where λ is an interpolation factor that is established *a priori*, and q'' represents one or more previous queries that have already been considered prior to the consideration of q'.

22.   (Original) The system of claim 17, the objects comprising one or more of documents, sounds, videos, images, and web sites.

23.   (Original) The system of claim 17, a user selects one of the previous queries, the selected previous query employed as the user search query.

24.   (Original) A cellular phone comprising the system of claim 17.

25.   (Original) A personal digital assistant comprising the system of claim 17.

26.   (Original) The system of claim 17 stored on a client.

27.   (Original) The system of claim 17, the data store being one of the Internet, an intranet, a server, and a hard drive.

28.   (Original) The system of claim 17, further comprising a serendipity component employed to select an amount of overlap required between a return set of the user search query and return sets of the previous queries in connection with determining the level of relatedness between the user search query and the previous queries.

29.   (Original) The system of claim 28, the serendipity component being alterable by a user.

30.   (Original) The system of claim 28, the serendipity component being automatically adjusted based at least in part upon one or more of user state, user identity, user context, and user history.

31.   (Currently Amended) A method for assisting a user search over a plurality of objects, comprising:

        receiving a user search query;

        searching a data store for objects according to the user search query to create a user search result set, the objects being associated with queries previously employed to locate the objects;

        reviewing the previously employed queries that were previously employed to locate one or more objects within the user search result set;

        determining a level of relatedness between the user search query and the previously employed queries, wherein the level of relatedness is based at least in part upon distance metrics between the user search query and the previously employed queries;

        selecting a query that was previously employed based upon a calculated level of relatedness between a result set of the previous query and the user search result set; and

        displaying the retrieved query.

32.   (Canceled)

33. (Currently Amended) The method of claim ~~31~~ 32, further comprising utilizing a modified maximal marginal relevance scheme to calculate the level of relatedness between the result set of the previous query and the user search result set.

34. (Original) The method of claim 31, further comprising positioning the selected query within a plurality of queries according to the level of relatedness.

35. (Original) The system of claim 31, further comprising choosing the displayed query and utilizing the displayed query as the user search query.

36. (Original) The method of claim 31, the data store being one of the Internet, an intranet, a server, and a hard drive.

37. (Currently Amended) A system that assists a user in connection with searching for objects, comprising:
  means for associating objects with queries previously utilized to locate such objects;
  means for searching over the objects given a user search query;
  means for determining a level of relatedness between the previously utilized queries and the user search query; and
  means for displaying previously utilized queries according to the determined level or relatedness, wherein the level of relatedness is determined at least in part by comparing a result set associated with the user search query with a result set associated with the previously utilized queries.

38. (Canceled)

39.   (Currently Amended) A computer readable medium having computer executable instructions stored thereon to:

search over a plurality of objects given a user search query, the objects associated with queries previously employed to locate such objects;

calculate a level of relatedness between the user search query and the previously employed queries, wherein the level of relatedness is determined at least in part by comparing a result set associated with the user search query with a result set associated with the previously utilized queries; and

display one or more previous queries according to the calculated level of relatedness.